IN THE CLAIMS

1.   (Original) A receiver for signals received on a wireless network, said receiver working at a so-called reference oscillation frequency, said oscillation frequency being controlled by means of a so-called reference value, including:

demodulation means for demodulating the received signal,

means of estimating a mean value of the demodulated signal,

means of correcting the mean value of the demodulated signal to the reference value,

decision means for determining the binary values adopted by the received signal,

characterized in that the estimation means include first means of rapid extraction of a first mean value of the demodulated signal used in decision means during a first period of time and second means of slow extraction of a second mean value of the demodulated signal used in correction means and, during a second period of time, in decision means.

2.   (Original) A receiver as claimed in Claim 1, characterized in that the means of correcting the mean value of the demodulated signal use a frequency correction loop.

3.   (Currently amended) A receiver as claimed in ~~one of Claims 1 and 2~~Claim 1, characterized in that the second extraction means include low-pass filtration means for extracting the mean frequency of the signal.

4.   (Currently amended) A receiver as claimed in ~~Claims 1 to 3~~Claim 1, characterized in that the first estimation means include means for evaluating the minimum and maximum of the received signal and estimating the mean value of the signal at the median value of the minimum and maximum.

5.   (Currently amended) A receiver as claimed in ~~Claims 1 to 4~~Claim 1, characterized in that, the received signal consisting of a synchronization and control part and then a data part, the first period does not exceed the duration necessary for receiving the synchronization and control parts.

6.   (Currently amended) An integrated circuit including a receiver as claimed in ~~one of Claims 1 to 5~~Claim 1.

7.   (Original) A method of receiving and processing signals received on a wireless network, including the steps of

demodulation for demodulating the received signal,

estimation of the mean value of the demodulated signal,

correction of the mean value of the demodulated signal to the reference value,

decision for determining the binary value taken by the received signal, characterized in that the estimation step includes a rapid substep of extracting a first mean value of the demodulated signal used in the decision step during a first period of time and a second substep of slow extraction of a second mean value of the demodulated signal used in the correction step and, during a second period of time, in the decision step.